

**Amendments to the Claims:**

This listing of claims replaces all prior versions of the claims in the application:

Claims 1-55 (canceled).

Claim 56 (currently amended). A hydrogel foam formed by polymerization of at least one ethylenically-unsaturated monomer and a multi-olefinic crosslinking agent in the presence of [[a]] an inorganic carbonate blowing agent under foaming conditions effective to produce a porous polymer network, which network has an average pore size of 10  $\mu\text{m}$  to 3000  $\mu\text{m}$ .

Claim 57 (previously amended). The hydrogel foam of claim 56, wherein the ratio of multi-olefinic crosslinking agent to ethylenically unsaturated monomer is in the range of 0.01:100 to 10:100.

Claim 58 (previously amended). The hydrogel foam of claim 56, wherein the at least one ethylenically-unsaturated monomer is selected from the group consisting of (meth)acrylic acid, salts of (meth)acrylic acid, esters of (meth)acrylic acid, salts and acids of esters of (meth)acrylic acid, amides of (meth)acrylic

acid, N-alkyl amides of (meth)acrylic acid, salts and acids of N-alkyl amides of (meth)acrylic acid, N-vinyl pyrrolidinone, acrylamide, acrylamide derivatives, methacrylamide, methacrylamide derivatives, and mixtures thereof.

Claim 59 (previously amended). The hydrogel foam of claim 56, wherein the at least one ethylenically-unsaturated monomer is selected from the group consisting of acrylamide (AM), N-isopropylacrylamide (NIPAM), 2-hydroxyethyl methacrylate (HEMA), 2-hydroxypropyl methacrylate (HPMA), N-vinyl pyrrolidinone (VP), acrylic acid (AA), 2-acrylamido-2-methyl-1-propanesulfonic acid (AMPS), 3-sulfopropyl acrylate potassium salt (SPAK), 2-(acryloyloxy)ethyltrimethyl-ammonium methyl sulfate (ATMS), inorganic salts thereof, and mixtures thereof.

Claim 60 (previously amended). The hydrogel foam of claim 56, wherein the crosslinking agent is selected from the group consisting of N,N'-methylene-bisacrylamide, ethylene glycol di(meth)acrylate, piperazine diacrylamide, glutaraldehyde, epichlorohydrin, crosslinking agents containing 1,2-diol structures, crosslinking agents containing functionalized peptides, and crosslinking agents containing proteins.

Claim 61 (previously amended). The hydrogel foam of claim 56, which has a swelling ratio in the range of 2 to 1,000.

Claim 62 (previously amended). The hydrogel foam of claim 56, which has a compression modulus in the range of 0.01 to 5 kg/cm<sup>2</sup>.

Claim 63 (previously amended). The hydrogel foam of claim 56, which has a swelling time in the range of 10 seconds to 10 hours for a sample having a size in the range of 0.01 cm<sup>3</sup> and larger.

Claim 64 (withdrawn). A method for treating a disease or disorder in a human or animal patient, said method comprising introducing onto or into the body of said patient a quantity of a hydrogel material comprising a crosslinked polymer, which hydrogel material has an average pore size of 10 μm to 3000 μm.

Claim 65 (withdrawn, previously amended). The method of claim 64, wherein said hydrogel material further comprises particles of a disintegrant disposed within said crosslinked polymer.

Claim 66 (withdrawn, previously amended). The method of claim 65, wherein said disintegrant is at least one of (i) a crosslinked natural or synthetic polyelectrolyte, (ii) a

crosslinked neutral hydrophilic polymer, (iii) a non-crosslinked natural or synthetic polyelectrolyte having a particulate shape, (iv) a non-crosslinked neutral hydrophilic polymer having a particulate shape, or (v) a porous inorganic material that provides wicking by capillary forces.

Claim 67 (withdrawn, previously amended). The method of claim 64, wherein said hydrogel material further comprises an effective amount of a therapeutic agent.

Claim 68 (withdrawn, previously amended). The method of claim 64, wherein said hydrogel material is introduced into a bleeding site to thereby control bleeding.

Claim 69 (withdrawn, previously amended). The method of claim 64, wherein said hydrogel material is introduced into the stomach to thereby control appetite.

Claim 70 (withdrawn, previously amended). The method of claim 64, wherein the hydrogel material forms at least a portion of an artificial body part that is introduced into the body, said artificial body part being selected from the group consisting of

artificial pancreas, artificial cornea, artificial skin, and  
artificial articular cartilage.

Claim 71 (withdrawn, previously amended). The method of claim  
64, wherein the hydrogel material is introduced into a sub-  
mammary incision to thereby afford breast augmentation.

Claim 72 (withdrawn, previously amended). The method of claim  
64, wherein the hydrogel material is introduced into or onto the  
body as a tissue engineering substrate.

Claim 73 (withdrawn, previously amended). The method of claim  
64, wherein the hydrogel material is applied to a burn site as  
part of a burn dressing.